

I. E. Krimmoltz

N. G. Gusev, Ibid. 180-81.—G. is concerned about the influence of ionizing radiation on the health of individuals and their descendants. The max. permissible radiation level is defined as the amt. which will not be harmful during life-long exposure. Reliable measurements exist presently only for γ and x-rays up to 3 m.e.v. as a result of biol. and medical investigations. Some theoretical calcs. are presented which deal with the max. permissible level of radiation exposure to γ -rays, β -rays, thermal neutrons, fast neutrons (0.5-20 m.e.v.), and very fast neutrons (>20 m.e.v.). A max. permissible exposure dosage as a function of exposure time is arrived at for the above radiations. G. recommends decrease of exposure to ionizing radiations to the lowest possible level until reliable measurements are available.

A. Krimmoltz

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C'VOVA, M.A.

PHASE I BOOK EXPLOITATION 307/4563

Metody polucheniya i izmereniya radioaktivnykh preparatov; stomik
skay (Methods for the Production and Measurement of Radio-
active Preparations; Collection of Articles) Moscow, Akademiya,
1960. 307 p. Extra slip inserted. 6,000 copies printed.

General Ed.: Valeriy Viktorovich Bockharov; Ed.: M.A. Sagurov;
Tech. Ed.: N.A. Vlasov.

PHASE I: This collection of articles is intended for scientific and
technical personnel working in the production of radioactive isoto-
pes.

CONTENTS: The collection contains original studies on methods of
obtaining and measuring radioactive preparations. According to
the foreword, the articles contain new data, and are of theoretical
or practical interest to the extent that they discuss methods of
obtaining and measuring radioactive preparations. In addition to several survey articles
the collection contains discussions on the production of radio-
active isotopes and inorganic radioactive preparations, including
a number of carrier-free isotopes and several colloidal and other
therapeutic preparations. Also discussed are methods for preparing

In a number of tagged organic compounds, problems in the analy-
sis of tagged organic compounds, the absolute and relative measure-
ment of activity and the radiometric analysis of preparations. New
instruments and equipment are described and instructions concern-
ing measurement methods and technique are included. V.I. Levin,
Candidate of Chemical Sciences, V.P. Shalevov, Candidate of Tech-
nical Sciences, I.K. Bockharov, Candidate of Biological Sciences,
and V.I. Shostak, Candidate of Chemical Sciences, are mentioned
as having helped directly in the selection and preparation of the
material for publication. References accompany each article.

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AVAILABILITY: Library of Congress (DD66.347)

37

PHASE I BOOK EXPLOITATION

SOV/6333

Bochkarev, V. V., ed.

Tekhnika izmereniye radioaktivnykh preparatov; sbornik statey (Techniques for the Measurement of Radioactive Preparations; Collection of Articles) Moscow, Gosatomizdat, 1962. 4600 copies printed.

Eds.: A. M. Smirnova and M. A. Smirnov; Tech. Ed.: S. M. Popova.

PURPOSE: This book is intended for specialists in nuclear instrumentation.

COVERAGE: The book is a collection of articles on recent developments in 1) measurement of the activity and 2) analysis of the composition of emissions of radioactive preparations. The methodology and apparatus used in these studies are described in detail. References are given at the end of each article.

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Techniques for the Measurement (Cont.)

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Kononenko, A. M., V. A. Petrov, and V. Ye. Yakhontova. Dose Distribution Along the Axis of a β -Emitting Plane Disk 100

Bashenov, V. A., V. V. Bochkarev, and T. N. Sokolova. Measurement of the Activity of Gaseous Preparations by Means of a Gas-Filled Counter 115

Turkin, A. D. Radiometry of β -Emitting Gases by Means of End-Window Counters 124

Card 3/5 1/2

L 48812265

ENT(m)/EMA(h)

ACCESSION NR: AP5008339

S/0115/65/000/001/0048/0050

AUTHOR: Barycheva, L. Ya.; Denisikov, A. I.; Dorofeyev, G. A.;
L'yova, M. A.; Bochkarev, V. V.; Garapov, E. F.; Gryaznov, Yu. N. 17
B

TITLE: Comparison of various methods of activity measurements by beta and gamma radiations

SOURCE: Izmeritel'naya tekhnika, no. 1, 1965, 48-50

TOPIC TAGS: radioactivity, radioactivity measurement, radioactive preparation

ABSTRACT: For evaluating the methods and accuracies of activity measurements, a number of Co^{60} and Fe^{59} preparations were tested in the laboratories of GK AE SSSR and Health Ministry SSSR. These methods were used: (1) Beta-gamma coincidence (stilbene detector and NaI(Tl) crystal); (2) Gamma-gamma coincidence; (3) Two 4π -beta proportional flow counter; (4) End-window counter; (5) Ionization chambers. The absolute measurements by methods 1, 2,

Card 1/2

L 46813-65

ACCESSION NR: AP5008339

and 3 were found to be correct to within $\pm 1\%$. Measurements with F^{59} were less accurate because of the low specific activity of solutions (gamma) and complicated decay mode (beta-gamma). Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 003

Card 2/2

L'VOVA, M.A., BOCHKAREV, V.V. (Moskva)

Imitators of short-living iodine isotopes. Med. rad, 10 no.9:90-91
S '65. (MIRA 18:10)

L'VOVA, M.G. (L'vov)

Fascioliasis. Vrach.delo no.11:123-124 N '62.

(MIRA 16:2)

1. Fakul'tetskaya klinika sanitarno-gigiyenicheskogo i pediatri-
cheskogo fakul'teta L'vovskogo meditsinskogo instituta (zav. -
dotsent S.M. Martynov) na baze terapevticheskogo otdeleniya
5-y klinicheskoy bol'nitsy.

(LIVER FLUKE)

L'VOVA, M.N., agronom; MILICH, M.S., agronom

Interplanting alfalfa with winter rye. Zemledelie 7 no.1:77
Ja '59. (MIRA 12:1)

1. Kolkhoz "13-letiyе Oktyabryа" (for L'vova). 2. Agrokhimlabora-
toriya Komarovskoy remontno-tekhnicheskoy stantsii (for Milich).
(Alfalfa) (Rye)

L'VOVA, M.V.

Underground waters in the southern Mangyshlak Peninsula.
Trudy VNIGRI no.218:169-184 '63. (MIRA 17:3)

PETROV, D.A., prof., red.; KOLACHEV, B.A., kand. tekhn. nauk
[translator]; L'VOVA, N.M., red.; PRIDANTSEVA, S.V.,
tekhn. red.

[New data on the production of single crystals of semi-
conductors] Novoe v poluchenii monokristallov polupro-
vodnikov; sbornik statei. Moskva, Izd-vo inostr. lit-
ry, 1962. 259 p. Translated from the English.

(MIRA 16:11)

(Crystals--Growth) (Semiconductors)

BUNCHUK, V.A., redaktor; RATUSH, P.P., redaktor; ~~L'VOVA, M.S., vedushchiy~~
redaktor; SHIKIN, S.T., tekhnicheskii redaktor

[Tank farms and petroleum pipelines (design, construction and exploitation); according to reports at the Conference for the improvement of the designing, construction and exploitation of tank farms and petroleum product pipelines] Neftebazy i nefteprovody (proektirovanie, stroitel'stvo i eksploatatsiia); po materialam konferentsii po uluchshcheniiu proektirovaniia, stroitel'stva i eksploatatsii neftebaz i nefteproduktoprovodov. Moskva, Gos. nauchno-tekhn. izd-vo neflianoi i gorno-toplovoi lit-ry, 1956. 197 p.

(MLRA 9:10)

1. Nauchno-tekhnicheskoye obshchestvo neftyanoy promyshlennosti.
(Petroleum--Pipelines)
(Petroleum--Storage)

L'VOVA, N.; KISTANOVA, L.

For you, automobilists. Za rul. 18 no.5:22 My '60.

(MIRA 14:3)

1. Starshiy inspektor Glavkurorttorga Ministerstva trgovli
RSFSR (for L'vova).

(Tourist camps, hostels, etc.)

L'VOVA, N.A.

Schistosity of the Mama mica-bearing formation. Izv. vys. ucheb.
zav.; geol. i razv. 1 no.4:17-31 Ap '58. (MIRA 11:12)

1. Irkutskiy gorno-metallurgicheskiy institut, Kafedra petrografii i
poлезnykh iskopayemykh.
(Mama Valley--Mica)

L'VOVA, N.A., Cand Geol-Min Sci --(diss)" On the character
and nature of stratification of the basaltic-bearing stratum
(pre-Cambrian)." Irkutsk, 1959. 26 pp (Min of Higher Education
USSR. Irkutsk Mining Metallurgical Inst. Chair of Mineral
Respectors
~~Deposited~~ and Petrography), 160 copies (EL,30-59, 119)

- 9 -

L'VOVA, N.A.

Ways of studying the primary sedimentation features of a Pre-Cambrian Mama formation. Izv.vys.ucheb.zav.; geol.i razv. 4
no.2:20-35 F '61. (MIRA 14:6)

1. Irkutskiy politekhnicheskiy institut.
(Geology, Stratigraphic)

KOLACHEV, B.A., kand.tekhn.nauk [translator]; PETROV, D.A., prof., red.;
~~L'YOVA, N.M.~~, red.; PRIDANTSEVA, S.V., tekhn.red.

[Silicon] Kremnii; sbornik statei. Moskva, Izd-vo inostr.lit-ry,
1960. 435 p. (Translated from the English). (MIRA 13:11)
(Silicon)

L'VOVA, N. L.

L'VOVA, N. L.: "Methodology of teaching the subject 'The Preposition' in the sixth class of schools in Mari". Moscow, 1955. Acad Pedagogical Sci RSFSR. Sci Res Inst of Teaching Methods. (Dissertations for the Degree of Candidate of Pedagogical Sciences.)

SO: Knizhnaya Letopis' No. 50. 10 December 1955. Moscow.

L'VOVA, N.-M.

"Problem of the Preservation of Potatoes at Temperatures Close to 0°C." Cand
Tech Sci, Moscow Inst of National Economy imeni G. V. Plekhanov, Min Trade USSR,
Leningrad, 1954. (KL, No 4, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions, (13)
SO: Sum. No. 598, 29 Jul 55

PLYUSHCHEV, V.Ye., kandidat khimicheskikh nauk, redaktor; L'VOVA, N.M.,
redaktor; IOVLEVA, N.A., tekhnicheskii redaktor

[Cesium; a collection of translations (from foreign periodical
literature)] TSezii; sbornik perevodov (iz inostrannoi periodicheskoi
literatury). Moskva, Izd-vo inostrannoi lit-ry, 1956. 134 p.
(Cesium) (MIRA 10:1)

L'VOVA, N.M.

YEMEL'YANOV, V.S., red.; YEVSTYUKHIN, A.I., doktor tekhn.nauk, red.;
L'VOVA, N.M., red.; BELEVA, M.A., tekhn.red.

[Purification of metals; a collection of translations] Metody
polucheniia chistykh metallov; sbornik perevodov. Moskva, Izd-vo
inostr.lit-ry, 1957. 384 p. (MIRA 11:1)

1. Chlen-korrespondent AN SSSR (for Yemel'yanov).
(Metallurgy)

L'VOVA, N.M.
KOMISSAROVA, L.N., kand.khim.nauk, red.; PLYUSHCHEVA, V.Ye., kand.khim.
nauk, red.; L'VOVA, N.M., red.; SHEMANINA, V.N., red.; SMIRNOVA,
N.I., tekhn.red.

[Rare earth metals; a collection of articles. Translations.]
Redkozemel'nye metally; sbornik statei. [Perevody.] Moskva,
Izd-vo inostr.lit-ry, 1957. 419 p. (Redkie metally 57 La
(138,9) - 71 Lu (175,0)) (MIRA 11:1)
(Rare earth metals)

PLYUSHCHEV, V.Ye., kand.khim.nauk, red.; L'VOVA, N.M., red.; KLIMENKO,
S.V., tekhn.red.

[Lithium; collection of translations] Litii; sbornik perevodov.
Moskva, Izd-vo inostr.lit-ry, 1959. 331 p. (MIRA 13:8)
(Lithium)

KOLCHIN, O.P., kand.tekhn.nauk, red.; L'VOVA, N.M., red.; DZHATIYEVA,
F.Kh., tekhn.red.

[Niobium and tantalum; collected papers] Niobii i tantal;
sbornik statei. Pod red. O.P.Konchina. Moskva, Izd-vo inostr.
lit-ry, 1960. 485 p. (MIRA 14:4)
(Niobium) (Tantalum)

L'VOVA, N.S.

Formation of fog in the Kirovograd region. Trudy Ukr NIGMI
no.10:48-52 '59. (MIRA 13:5)

1. Aviameteorologicheskaya stantsiya v Grazhdanskom vozdušnom
flote, Kirovograd.
(Kirovograd region--Fog)

L'VOVA, N.V.; ARTEMOVA, T.V.

Diagnosis of gastrointestinal diseases in infants, according
to consultation data. Zdrav. Kazakh. 23 no.2:57-61'63.
(MIRA 16:10)

1. Iz kafedry gosspital'noy padiatrii (zav. - prof. A.I.
Avenirova) Kazakhskogo meditsinskogo instituta.
(ALIMENTARY CANAL—DISEASES)
(INFANTS—DISEASES)

RAYEV, B.V.; BAKALDINA, N.I.; L'VOVA, N.Ye.; TRET'YAKOV, A.A.

Review of three criteria in Borbov's complex hemotuberculin method and considerations on possible errors in determination of erythrocytes sedimentation time and in formula of leukocytes. Probl. tuberk., Moskva no. 5:51 Sept-Oct 1952. (CLML 23:5)

1. Docent. 2. Of the Department of Faculty Therapy (Head--Prof. A. V. Seleznev) of Molotov Medical Institute (Director -- Docent A. N. Kushnev) and of Molotov Municipal Anti-Tuberculosis Dispensary (Head Physician -- M. V. Tarasova).

VLADIMIROV, Yu.A.; L'VOVA, O.F.

Extremely weak luminescence and oxidative phosphorylation in
mitochondria. Biofizika 9 no.4:506-507 '64. (MIRA 18:3)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

GASIK, Mikhail Ivanovich, kand. tekhn. nauk, dots.; L'VOVA, Ol'ga
Konstantinovna, inzh.; RAGULINA, Raisa Ivanovna, inzh.;
ALIVOVODICH, Miro Khristoforovich, inzh.; KHITRIK, S.I.,
prof., doktor tekhn. nauk, nauchn. red.

[Manufacture and operation of continuously self-annealing
electrodes and anodes] Proizvodstvo i ekspluatatsiia ne-
preryvnykh samoobzhigaiushchikhsia elektrodov i anodov.
Moskva, Metallurgii, 1965. 254 p. (MIRA 18:5)

USSR/Cultivated Plants - Grains:

11-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39270

Author : L'vova, P.F.

Inst : Scientific Research Institute of Agriculture of the
Central Chernozem Belt.

Title : New Varieties of Leguminous Grain Crops.

Orig Pub : Byul. nauchn.-tekhn. inform. II.-i. in-ta s. kh. TsChP,
1956, No 1, 34.

Abstract : The following new varieties of leguminous grain crops
are grown by the Institute of Agriculture in. V.V. Doku-
chayev pea variety - Stepnay, early ripening variety of
the summer vetch Stepnaya 791 and 2 varieties of vetchling
Stepnaya 21 and Stepnaya 237.

Card 1/1

COUNTRY USSR
CATEGORY Cultivated Plants. Grains. Leguminous Grains.
Tropical Cereals.
ABST. JOURN: Ref Zhur-Biologiya, No. 1, 1959, No. 162
AUTHOR : L'vova, P.F.
INST. : Sci. Res. Inst. of Agric. of the Central Chernozem
TITLE : Blending of Bean and Corn Sowings.

ORIG. PUB.: Byul. nauchno-tekhn. inform. N.-i. in-ta A.-zh.
Tekhn.-kharaktern. polozh., 1957, No. 3, 10-20

ABSTRACT : In experiments of the Agricultural Institute
iment. L'vova (1946-1955) in blended
sowing of bean and corn, the corn crop almost
did not depend on the distribution scheme; in
sowing in the field with bean 40 centners/hectare,
in autumn hills 57.5 centners/hectare; but the
bean crop increased sharply: bean and corn in the
plants per hill 6 centners, in autumn hills they gave 12.5 centners, in autumn
between the corn in autumn pocket sowing with

ORIG. : 1/2 *bolt.

ABST. JOURN: Ref Zhur-Biologiya, No. 1, 1959, No. 162

ABSTRACT : double line sowing 16.5% corn crop, 50.5
centners/hectare. The latter scheme is proposed
to have a positive effect on the growth and
development of both plants; the plants do not
interfere with one another. The bean is sown
in the 6 row in wide and high temperature;
chrysothoides act destructively on disease agents
of the bean, and the bean enriches the soil
with nitrogen. -- M.V. Krutshnikov

CARD : 2/2

L'VOVA, P.F., kand.biol.nauk; POLESHCHUK, Yu.M.

High yields of peas in Voronezh Province. Zemledelia 7 no.4:
52-54 Ap '59. (MIRA 12:6)

1. Institut sel'skogo khozyaystva tsentral'no-chnozemnoy
polosy imeni V.V.Dokuchayeva.
(Voronezh Province--Peas)

BAYULA, A.G.; YAMPOL'SKAYA, M.Ya.; L'VOVA, R.T.

Flotation of fluorite from silicate ores of the Far East. Izv.
Sib.otd.AN SSSR no.2:38-45 '60. (MIRA 13:6)

1. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR.
(Fluorite) (Flotation)

GEL'PERIN, E.I.; AYNSTEYN, V.G.; GEL'PERIN, E.H.; L'VOVA, S.D.

Hydrodynamic characteristics of the fluidization of granular materials
in conical-cylindrical units. Khim.i tekhn.topl.i masel 5, no.8:51-
57 Ag '60. (MIRA 3:8)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.
Lomonosova.

(Fluidization)

(Granular materials)

YEVSTIGNEYEVA, R.P.; L'VOVA, S.D.; PREOBRAZHENSKIY, N.A.

Synthesis of the ethyl ester of 2,7-di-(β -diethylaminoethyl)-
3,8-dimethyl-4,6,9-triketocapric acid. Zhur. ob. khim. 34 no.10:
3315-3317 0 '64. (MIRA 17:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova.

L'VOVA, S.D.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Synthesis of esters of α -methyl- β -(β' -carbomethoxyethyl)
levulinic acid. Zhur. org. khim. 1 no.9:1555-1559 S '65.
(MIRA 18:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova. Submitted July 17, 1964.

L'VOVA, S.D.; YEVSTIGNEYEVA, R.P.; LAVROVA, L.N.; FILIPPOVICH, Ye.I.;
PREOBRAZHENSKIY, N.A.

Claisen condensation of α -methylevalulinic acid esters. Zhur.
org. khim. 1 no.9:1560-1563 S '65. (MIRA 18:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova. Submitted July 17, 1964.

L'VOVA, S. N. and ZUYEV, M. V.

"Errors in the Measurement of Air Temperature and Humidity by Thermometers
in Psychrometric Booths".
Trudy Tashkentsk, geofiz. observ., No 8, pp 94-101, 1954.

Investigation of errors in the measurement of temperature and humidity in a psychrometric booth as function of the booth's elevation, color, time of year and time of day is given. The observations were carried out in the course of 1950-1951 in various booths painted white, gray, green and black and set at elevations of 1.5 and 2.0 meters.
(RZhGeol, No 9, 1955)

SO: Sum No 884, 9 Apr 1956
inv No 845, 7 Mar 56

L 40729-65

ACCESSION NR: AP5012400

UR/0020/64/157/006/1463/1465

14
B

AUTHOR: L'vova, S. P.

TITLE: Respiration and oxidative phosphorylation of rabbit brain at different periods of postnatal development

SOURCE: AN SSSR. Doklady, v. 157, no. 6, 1964, 1463-1465

TOPIC TAGS: biochemistry, enzyme, experiment animal, brain, respiratory system, organic synthetic process

Abstract: In the course of ontogenesis in the organism, changes occur in the activity and linkage of enzyme systems. Various metabolism-disrupting agents are used to detect regularities of development. The author used forced inhalation of oxygen under high pressure by animals as such an agent. This leads to very decided shifts in metabolism of carbohydrates and of nitrogen-containing compounds. Respiration and phosphorylation of the brain were observed in the normal state and after oxygen under 6 atmospheres pressure had acted on the animals. The experiments were carried out on rabbits of 3 ages: one-day old, one month-old, and adults (9 months). Each age group consisted of 10-14 animals. It was found that oxygen requirements in control animals increased sharply by the first month of postnatal life. Compared with these, respiration decreased

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ACCESSION NR: AP5012400

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somewhat in the adult animals. Fixation of inorganic phosphorus varied in the same way at the ontogenetic stages studied. Comparison of the values of respiration and phosphorylation indicated some discoordination of these processes in ontogenesis which is probably related to homeothermicity. The sensitivity of animals to hyperoxemia increases with age. When exposed to 6 atmospheres of pure oxygen, seizures in the 1-day old rabbits developed in 50-80 minutes, while in some animals seizures did not appear even after 1.5 hours. In month old animals seizures appeared in 16-25 minutes, and in adults --- in 12-17 minutes. When exposed to 6 atmospheres of oxygen pressure, respiratory intensity (17.75%) and phosphorylation rate (16%) of brain tissues increased in newly born animals, without change in the relationship between these two linked processes. By using increased oxygen pressure, it was possible to establish that the formation of energy-generating processes in rabbits is prolonged during the postnatal period. System stability is acquired in the course of individual evolution. Hyperoxemia reduces intensity and disrupts interrelationships of respiration and phosphorylation in the brain at the moment of highest activity in the month-old rabbits; this effect was not observed in the adult animals. Orig. art. has 2 graphs and 2 tables.

ASSOCIATION: Rostovskiy-na-Donu gosudarstvennyy universitet (Rostov-na-Donu State University)

Card 2/3

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ACCESSION NR: AP5012400

SUBMITTED: 17Feb64

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OTHER: 004

JPRS

Card 3/3

L 6726-65 EPA(s)-2/EXT(m)/T/ENP(q)/ENP(b) Pt-10 AFWL/ASD(a)-5/ESD(t)/RAEM(t)
JG/JD/RWH

ACCESSION NR: AP4046466

67 S/0032/64/030/010/1196/1198

AUTHORS: Zakhar'yevskiy, M. S.; L'vova, T. I.; Kuznetsova, I. N.; Kryzhanovskiy, B. P.

TITLE: The behavior of film semiconductor SnO_2 electrodes in reducing oxidizing surroundings

SOURCE: Zavodskaya laboratoriya, v. 30, no. 10, 1964, 1196-1198

TOPIC TAGS: oxidation, reduction, semiconductor, stannous oxide, film semiconductor, electrode, quinhydrone

ABSTRACT: The authors studied the dependence of the potential of various specimens of film semiconductor SnO_2 electrodes on the concentration ratio of the oxidation and reduction form in the reversible oxidation-reduction system $\text{Fe}^{3+} \rightleftharpoons \text{Fe}^{2+}$, $[\text{Fe}(\text{CN})_6]^{3-} / [\text{Fe}(\text{CN})_6]^{4-}$ and quinhydrone in buffer solution. Solutions containing $\text{Fe}^{3+} - \text{Fe}^{2+}$ were prepared by mixing iron sulfate and ferrous ammonium sulfate (Mohr's salt) in 0.1-n H_2SO_4 , thus yielding an Fe^{3+} and Fe^{2+} concentration of 0.004 moles/liter. The solution containing ferri-ferrocyanide radicals was prepared by

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mixing exact measures of potassium ferricyanide and potassium ferrocyanide in a standard buffer solution of pH=4.00, 6.88, and 9.18. An absolute potassium ferri- and ferrocyanide concentration of 0.0017 moles/liter was obtained. Quinhydrone was prepared similarly by several rinsings with the same buffer solutions. Results were plotted to show the dependence of the potential of galvanic elements I and II upon the logarithm of relative radical concentrations in the ambient solutions, and upon buffer solution pH for the quinhydrone case. A third plot shows the potential curve for the SnO_2 electrode for titration of bivalent iron by potassium bichromate. Orig. art. has: 3 figures and 1 formula. 27 27

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova
(Leningrad State University)

SUBMITTED: 00

ENCL: 00

SUB CODE: EE, GC

NO REF SOV: 006

OTHER: 002

Card 2/2

ZAKHAR'YEVSKIY, M.S.; L'VOVA, T.I.; KUZNETSOVA, I.N.; KRYZHANOVSKIY, B.P.

Behavior of SnO_2 semiconductor film electrodes in redox media.
Zav. lab. 30 no.10:1196-1198 '64. (MIRA 18:4)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

ACC NR: AP7012439

SOURCE CODE: UR/0079/66/033/012/2048/2052

AUTHOR: L'vova, T. I.; Pendin, A. A.; Shirko, K. D.; Nikol'skiy, B. P.

ORG: Leningrad State University (Leningradskiy gosudarstvennyy universitet)

TITLE: Standard thermodynamic constants of the reduction of the (ferrocenylmethyl) trimethylammonium cation to the (ferrocenylmethyl)trimethylammonium cation with hydrogen in an aqueous solution

SOURCE: Zhurnal obshchey khimii, v. 36, no. 12, 1966, 2048-2052

TOPIC TAGS: ferrocene, aqueous solution, hydrogen, electrochemical analysis, cation

SUB CODE: 07

ABSTRACT: (Ferrocenylmethyl)trimethylammonium perchlorate ($F^+ClO_4^-$) was prepared by precipitation of an F^+I^- solution with $KClO_4$. On the basis of the curves of potentiometric titration of $F^+ClO_4^-$ with $K_2Cr_2O_7$ or H_2O_2 , the normal potential of the system F^+ cation - (ferrocenylmethyl)trimethylammonium cation F^{++} in an 1 N KCl solution was 0.604 ± 0.001 v. The standard redox potentials of $F^{++} - F^+$ at 15, 25, and 35° were determined from the relations between the e.m.f. of the cell $Pt/F^{++}, F^+; HCl/glass$ electrode and the ionic strength of the solution at these temperatures. On the basis of the data obtained. the

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UDC: 546.171.1:541.138.2

0932 1390

ACC NR: AP7012439

standard thermodynamic constants of the reduction of F^{++} to F^+ with hydrogen at 25°C were determined at $\Delta G^\circ = -15.17 \pm 0.3$ kcal., $\Delta H^\circ = -21.1 \pm 0.3$ kcal., and $\Delta S^\circ = -23 \pm 1$ entropy units. The titration data indicated that the $F^{++} \rightarrow F^+$ reaction was electrochemically reversible. Orig. art. has: 2 figures and 4 formulas. [JPRS: 40,422]

2/2

L'VOVA, T. N.

Cand Geolog-Mineralog Sci

Dissertation: "Structure and Origin of the Coal-Bearing Formation of Okriba."
30/3/50

Moscow Order of Lenin State V imeni M. V. Lomonosov.

SO Vecheryaya Moskva
Sum 71

LEVINA, S.D.; L'VOVA, T.N.

Origin of carbonate rocks in Caradoc sediments of the Selety-
Stepnyak region in northern Kazakhstan. Biul. MOIP. Otd.
geol. 34 no.5:81-93 S-O '59. (MIRA 14:6)
(Kazakhstan--Rocks, Carbonate)

27.2000
27.6320
27.5100

37203

S/560/61/000/011/009/012
E027/635

AUTHORS: Gyurdzhian, A.A., Demin, N.N., Korneyeva, N.V.,
L'vova, T.S., Tutochkina, L.T., Uspenskaya, M.S.,
Fedorova, T.A.

TITLE: Some aspects of metabolism in animals which have
undergone a space flight

SOURCE: Akademiya nauk SSR. Iskusstvennyye sputniki Zemli.
no. 11. Moscow, 1961. Rezul'taty nauchnykh
issledovaniy, provedennykh vo vremya poletov vtorogo
i tret'yego kosmicheskikh korabley-sputnikov, 78 - 86

TEXT: The authors have studied biochemical processes in dogs
during training and after flights in rockets and satellite vehicles
particular attention being devoted to those processes which are
affected by stress conditions and by exposure to ionizing
radiation. The dogs were first adapted to space flight conditions,
in which they were exposed to vibrations of frequency 70 cycles and
amplitude 0.4 mm continued for up to 12 minutes, and to

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S/560/61/000/011/009/012
E027/635

Some aspects of ---

accelerations of 6-9 g continued for 5 - 12 minutes. Eighteen dogs were studied in all, of which five made space flights in 1958-59 while thirteen remained on the ground. The dogs Belka and Strelka were investigated before the flight and 2, 6, 13, 23, 25 and 32 days afterwards. One dog (Otvazhnaya) made five flights. Two rats and five mice of the C57 line were also studied after a flight in the second satellite. In the dogs, determinations were made of the fractional composition of the serum proteins, the serum mucoids, pseudocholinesterase activity, and the content of free and bound 21-hydroxy-20-kestosteroids in the urine. During the training period marked fluctuations occurred in the serum proteins, both in the animals which made space flights and in the others. After acceleration in the centrifuge a rise in cholinesterase activity occurred, reaching a peak after two days and then declining, and there was also a rise in the content of serum mucoids and a fall in the total protein content of the serum. Similar, but less marked effects, were observed after exposure to vibration. A rise in serum mucoids occurred two to six days

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3

Some aspects of ---

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E027/635

after return from a space flight, and after six days there was a rise in the total serum proteins. No definite changes were observed in cholinesterase activity. From a consideration of the results three states could be distinguished in the animals in response to training and space flights: (1) activation of functions; (2) a dystrophic condition, and (3) a reaction of stress type characterized by a reversible inhibition of functions. In investigations of the urine no particular changes were noted in the volume or the specific gravity during training or after a space flight. A decrease in the content of deoxycytidine was observed in Belka and an increase in Strelka. After exposure to vibration and acceleration an increase of deoxythymidine and Dische-positive substances in the urine was observed in Otvazhnaya. One month later the levels of both had returned to normal. A fall in the Dische-positive substances to 50% of the control values was found in the urine of five mice five days after a space flight in the second satellite. It was concluded that

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Some aspects of ---

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the results indicated the occurrence of disturbances in the metabolism of deoxyribonucleic acid after a space flight, but that these disturbances were temporary and reversible. The responses of the animals resembled a stress reaction rather than radiation damage. There are 6 figures and 2 tables. ✓

SUBMITTED: May 23, 1961

Card 4/4

L'VOVA, T.S.

2

27. 2700

27. 1220

333111

S/560/61/000/010/012/016

D298/D302

AUTHORS:

Arsen'eva, M. A., Antipov, V. V., Petrukhin,
V. G., L'vova, T. S., Orlova, N. N., and
Il'ina, S. S.

TITLE:

Changes in the blood-forming organs of mice
under the effect of flight in a space-ship

SOURCE:

Akademiya nauk SSSR. Iskusstvennyye sputniki
Zemli. no. 10. Moscow, 1961, 82-92

TEXT: A study was made of the effects of flights in a space-
ship (the 2nd Sputnik) on the blood-forming organs of mice. An
attempt was made to differentiate between the action of vibra-
tion, acceleration and X-rays. The experiments were carried
out on 40 black C-57 (S-57) strain and white non-species mice.
Their weight fluctuated between 18 - 22 g. The same group of
animals was also used for the standard. All the animals re-
turned from cosmic flight in good condition. Cytology and

X

Card (1/4)

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D298/D302

Changes in the...

histology methods for investigating the brain and spleen were used. The peripheral blood and the morphology of the bone marrow were studied. Experiments showed that there is a statistically valid frequency increase of mitosis destruction in the bone marrow cells of the experimental animals compared to the controls. Obtained data on chromosome destruction of mitosis in the cells of the bone marrow in mice having been in cosmic flight showed that these differed from the results obtained in X-radiation. Two main differences were noted: (1) in cosmic flight, the frequency of chromosome destruction did not drop prior to the end of the experiment; (2) there was almost complete absence of fragmentation in chromosome changes. The morphology studies of the bone marrow showed that in mice isolated for 30 days after returning to earth a sharp rejuvenation of the myelopoiesis was noted, expressed through an increased number of myeloblasts, promyelocytes, myelocytes. Analysis of the peripheral blood showed no noticeable deviations from the

X

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D298/D302

Changes in the...

controls. The hystology tests indicated that in the spleen of mice isolated for three days after the experiment the number of megacariocytes drops. Further analysis of the cytology and histology data revealed that certain changes were noted in the blood-forming organs of the mice after cosmic flight. It is assumed, however, that these changes occurred due to several factors in addition to cosmic radiation. Special tests to differentiate the effects of the various factors showed that cosmic flight caused changes in the blood-forming organs due to mechanical factors as well as primarily vibration. Listed data indicate that vibration is one of the main causes of bone marrow and spleen changes. The biological effectiveness of cosmic radiation and other flight factors is said to be still unknown, requiring further studies of cosmic radiation effects over long periods of time on biological specimens. There 6 figures, 5 tables and 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as

X

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2

³³³¹⁴
S/560/61/000/010/012/016
D298/D302

Changes in the...

follows: F. Devik, Brit. J. Radiol., 27, 463, 1954; C. D.
Darlington, L. F. La Cour, J. Heredity, Suppl. 6, 1952.

SUBMITTED: May 3, 1961

X

Card 4/4

KAS'YAN, I.I.; YUGANOV, Ye.M.; L'VOVA, T.S.

Changes in some morphological and biochemical indices of the
peripheral blood of animals after a rocket flight. Probl.kosm.
biol. 1:161-165 '62. (MIRA 15:12)
(SPACE FLIGHT--PHYSIOLOGICAL EFFECT)
(BLOOD--ANALYSIS AND CHEMISTRY)

ARSEN'YEVA, M.A.; ANTIPOV, V.V.; PETRUKHIN, V.G.; L'VOVA, T.S.; ORLOVA,
N.N.; IL'INA, S.S.

Effect of the flight in the second spaceship on changes in the
hemopoietic organs of mammals. Probl.kosm.biol. 1:205-218 '62.
(MIRA 15:12)

(SPACE FLIGHT--PHYSIOLOGICAL EFFECT)
(HEMOPOIETIC SYSTEM)

S/865/62/002/000/012/042
D405/D301

AUTHORS: Arsen'yeva, M.A., Antipov, V.V., Petrukhin, V.G.,
L'vova, T.S., Orlova, N.N., Il'ina, S.S., Kabanova,
L.A., and Kalyayeva, E.S.

TITLE: Cytologic and histologic changes in blood-forming
organs of mice under the effect of space flight
conditions

SOURCE: Problemy kosmicheskoy biologii. v. 2. Ed. by N. Sisa-
kyan and V. Yazdovskiy. Moscow, Izd-vo AN SSSR, 1962,
116-127

TEXT: In the investigations, an attempt was made at differ-
entiating between the effects of dynamic factors of flight such as
vibration, acceleration and weightlessness. The experiments were
conducted on males of black-linear (G⁵⁷) mice, and on white mice.
A cytological analysis of the bone marrow cells revealed a distur-
bance of mitosis under the effect of space flight. It was found
that the majority of chromosome aberrations appeared not as a result

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Cytologic and histologic ...

S/865/62/002/000/012/042
D405/D301

of chromosome disruption, but through sticking together with possible subsequent anomalous separation. Morphological studies of the bone marrow showed, after 30 days, an increase in the number of myeloblasts, promyelocytes and myelocytes. Histologic investigations of the spleen of the mice showed, during the first days of the experiment, a decrease in the number of follicles and megacaryocytes; towards the 30th day the number of the latter increased again and on the 60th day the blood formation was renewed. Special experiments were conducted in order to ascertain the specific effects of vibration, acceleration and weightlessness. It was found that Serotonin, introduced intraperitoneally into the mice 10 minutes before the experiment, was an effective means of protection against vibration damage of cells. Conclusions: Space flight caused disturbances in the bone marrow and spleen of mice that were recorded two days after the flight and lasted for a month. Both vibration and weightlessness experiments produced such alterations as chromosome fusion. Acceleration in a state of weightlessness can lead to a disruption in the spindle apparatus of the cell. It is evident that the effects of space flight on the cell constitute a complex problem, involving

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Cytologic and histologic ...

S/865/62/002/000/012/042
D405/D301

many factors. However, the biological action of cosmic radiation is altogether undetermined as yet, requiring further studies. There are 9 figures and 3 tables.

Card 3/3

S/865/62/001/000/005/033
E028/E185

AUTHORS: Kas'yan, I.I., Yuganov, Ye.M., and L'vova, T.S.
TITLE: Changes in certain morphological and biochemical indices of the peripheral blood of animals after rocket flights
SOURCE: Problemy kosmicheskoy biologii. v.1. Ed. by N.M. Sisakyan, Moscow, Izd-vo AN SSSR, 1962. 161-165
TEXT: Determinations of blood count and blood biochemistry were carried out on 12 dogs which had undergone 2 to 5 space flights. Blood samples were taken on the eve of flight, 1.5 to 2.5 hours after landing, and also at later stages; 42 investigations were carried out in all. After the flight an increase in white cell count by 1800 - 11050 cells per mm³ was noted, due mainly to an increase in neutrophils with a shift to the left of up to 30% of unsegmented forms. These changes were ascribed to a redistribution of cells from depôt organs under the influence of mechanical forces, although a stress reaction may also have been concerned. No changes were noted in the red cell count, but after space flight there was a reduction in clotting time, with
Card 1/2

Changes in certain morphological...

S/865/62/001/000/005/033
E028/E185

an increase in calcium and prothrombia and a slight rise in the
platelet count.
There are 3 tables.

Card 2/2

S/865/62/001/000/010/033
E028/E185

AUTHORS: Arsen'yeva, M.A., Antipov, V.V., Petrukhin, V.G.,
L'vova, T.S., Orlova, N.N., and Il'ina, S.S.

TITLE: Changes in the haemopoietic organs of mammals under
the influence of space flight

SOURCE: Problemy kosmicheskoy biologii. v.1. Ed. by
N.M. Sisakyan. Moscow, Izd-vo AN SSSR, 1962. 205-218

TEXT: In a study of the effect of cosmic radiation upon the
haemopoietic system 40 mice of the C57 strain which had been on a
space flight were killed at intervals up to 60 days after return
and cytological preparations were made of the peripheral blood,
spleen and bone marrow. Abnormalities of mitosis in the form of
bridges and adhesions were observed in 7.12 - 10.78% of cells in
anaphase and telophase, compared with 1.96 - 3.8% of abnormalities
in preparations from control animals, and no decline in the
proportion of affected cells had occurred by the end of the
observation period. The findings differed in this respect from
the effects of X-irradiation, where the proportion of chromosome

Card 1/2

Changes in the haemopoietic organs... S/865/62/001/000/010/033
E028/E185

abnormalities declines steadily and the usual finding is fragmentation of the chromosomes. No abnormalities were noted in preparations of the peripheral blood. Preparations of the spleen showed a decline in megakaryocytes after 3 days and shrinkage of follicles after 9 days, followed later by enlargement and the appearance of atypical cells. The chromosome abnormalities described could be largely duplicated by exposure of normal mice to vibration, which was probably of greater importance than cosmic radiation as a cause of abnormalities in animals undergoing space flights.

There are 6 figures and 5 tables.

Card 2/2

ARSEN'YEVA, M.A.; ANTIPOV, V.V.; PETRUKHIN, V.G.; L'VOVA, T.S.;
ORLOVA, N.N.; IL'INA, S.S.; KABANOVA, L.A.; KALYAYEVA, E.S.

Effect of space flight in spaceships on the cytological and
histological changes in the hemopoietic organs of mice.
Probl.kosm.biol. 2:116-127 '62. (MIRA 16:4)
(SPACE FLIGHT—PHYSIOLOGICAL EFFECT)
(HEMOPOIETIC SYSTEM)

RAZGOVOROV, B.L.; MOROZOV, V.S.; SHASHKOV, V.S.; ANTIPOV, V.V.; DOBROV,
N.N.; KONNOVA, N.I.; L'VOVA, T.S.; SAKSONOV, P.P.

Effect of screening of separate parts of the animal body on
the change in radiation reaction following action of gamma
rays and high-energy protons. Probl. kosm. biol. 4:411-429 '65.
(MIRA 18:9)

L 14291-66 EWT(m)/ETC(F)/EPF(n)-2/EWG(m) GG/RD

ACC NR: AT6003875

SOURCE CODE: UR/2865/55/004/000/0411/0429

AUTHOR: Razgovorov, B. L.; Morozov, V. S.; Shashkov, V. S.; Antipov, V. V.;
Dobrov, N. N.; Konnova, N. I.; L'yova, T. S.; Saksonov, P. P.

ORG: none

TITLE: Effect of screening individual parts of the body of animals on changes in radiation reaction on exposure to gamma rays and high-energy protons

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 411-429

TOPIC TAGS: radiation shielding, RBE, rat, animal physiology, gamma irradiation, cobalt, radioisotope, proton, irradiation, radiation biologic effect

ABSTRACT: Previous experiments showed that screening of individual organs or parts of the body during large doses of x-rays or gamma rays can change both the degree of radiation sickness and the number of deaths. In this work experiments were conducted to determine the effect of screening during irradiation of animals with gamma rays and 120-Mev protons.

White rats of both sexes were used. Co⁶⁰ gamma irradiation with dose power of 15.5 r/min was used. Proton irradiation was conducted through Card 1/4

L 14291-66

ACC NR: AT6003875

lead-shielded polyethylene blocks to lower the dose (dose power 60 ± 10 rad/min). During gamma irradiation, parts of the body were screened with steel plates (15 cm thick) of different widths. Plexiglas blocks 12—15 cm thick, which almost completely blocked the proton flux from the screened part, served as shields during proton irradiation. The biological effect of radiation under these conditions was determined by the survival rate of animals during a 30-day period after irradiation. Localized shielding during gamma irradiation of rats in a dose of 930 rad produced a definite increase in the survival rate, which was most effective during screening of the abdomen (80% survival rate as compared with 6% in the control). It was concluded that screening of the abdomen lowers the mortality index to the greatest degree and also is most effective in easing the course of radiation sickness and lessening the degree of leukopenia.

In a second series of experiments, the abdomens of rats were shielded with plexiglas blocks of different widths during irradiation with protons in the following dose ranges: 800—1050 rad and 1100—1300 rad, and with gamma rays in doses of 930, 1100, and 1400 rad. It was found that screening the abdomen with a block 6 cm wide during proton irradiation with

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ACC NR: AT6003875

800—1050 rad increased the survival rate to 86.4% (as compared with 19.4% in the control). A high survival rate (96.7—100%) was also observed when the abdomen was screened with blocks of various widths during gamma irradiation (930 rad). Screening of the abdomen during proton irradiation also prevented the development of severe gastrointestinal disease in many cases and caused rats to lose less weight. Experimental animals recovered weight more quickly and even exceeded initial weight levels. Weight changes during gamma irradiation followed the same pattern.

Preliminary experiments were also conducted to show the effect of screening under the combined influence of protons and acceleration or vibration. Results showed that neither 30 min of acceleration (10g) nor 1 hr of vibration (700 cps, amplitude 0.005 min) altered the effectiveness of screening during proton irradiation (doses 750—1100 rad and 1050—1300 rad, respectively). Furthermore, it was found that the effectiveness of screening the abdomen increases with increased radiation dose. There is not yet any adequate explanation of the screening effect although it may be connected with retention by the organism of undamaged tissue sections.

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ACC NR: AT6003875

Orig. art. has: 5 figures and 4 tables. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 011 / OTH REF: 010

OC
Card 4/4

L 28/11/66 EWT(I)/EWT(M) SOTB DD

ACC NR: AP6015412

SOURCE CODE: UR/0216/66/000/003/0355/0361

AUTHOR: L'vova, T. S.

ORG: none

TITLE: Synergistic effect of ionizing radiation¹⁹ and vibration² on an animal organism

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 3, 1966, 355-361

TOPIC TAGS: mouse, biologic vibration effect, radiation biologic effect, radiation injury, synergy, animal physiology

ABSTRACT: The effect of vibration on radiation injuries was investigated in experiments on 1424 male white mice weighing 18 to 25 g. Groups of animals were exposed to 1 hr of vibration (70 and 700 cps) at periods of 4 hrs, 24 hrs, or 5 days before or after irradiation. Animals were irradiated with: 1) a single 600 r x-irradiation dose; 2) a single 450 r gamma-irradiation dose; or, 3) a single 1300 rad proton irradiation dose. Indexes included mortality rates, mean survival periods, and weight changes during a 30 day observation period. With vibration of 70 cps 4 hrs or 24 hrs prior to irradiation, the

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E 28443-66

ACC NR: AP6015412

mortality rate was reduced by 10% to 20% and the mean survival period was increased by 10% to 40% compared to control animals (irradiated only); with exposure to vibration of 70 cps 5 days prior to irradiation, the mortality rate was increased and the survival period was reduced. Exposure to vibration (70cps) 4 hrs, 24 hrs, and 5 days following irradiation reduced the mortality rate by 15% to 38%. Vibration of 700 cps 4 hrs, 24 hrs, and 5 days prior to irradiation and 24 hrs after irradiation did not affect the course of radiation injuries, but vibration (700 cps) applied 5 days after irradiation intensified radiation sickness. The effects of vibration and other dynamic factors on radiation injuries require further investigation. Orig. art. has: 5 tables. [06]

SUB CODE: 06/ SUBM DATE: 01Sep65/ ORIG REF: 018/ OTH REF: 002/
ATD PRESS: 5105

Card 2/2 LC

ACC NR: AT6036645

SOURCE CODE: UR/0000/66/000/000/0268/0269

AUTHOR: L'vova, T. S.

ORG: none

TITLE: Effect of vibration on the course and outcome of radiation sickness in animals [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966. 268-269

TOPIC TAGS: combined stress, ionizing radiation biologic effect, biologic vibration effect, hematology, rodent, dog, space physiology

ABSTRACT:

The purpose of the present experiment was to study the effects of vibration on the course of radiation injury in mice and dogs. An attempt was made to establish the influence of frequency of vibration, the irradiation dose, and the time between exposures. Experiments were performed on 1424 nonpedigreed white male mice weighing 18--25 g and on 20 male mongrel dogs. The animals were exposed to vibration either once or four times (with 24-hr intervals), both before and after irradiation. The intervals between exposures were 2 or 4 hr and 1 or 5 days. Animals were exposed to vibra-

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ACC NR: AT6036645

tion of 70 cps at 0.4 mm or of 700 cps at 0.005 mm, in such a way that in each case the acceleration stress amounted to 10 G. X-rays, gamma rays, or high-energy protons were used for irradiation.

The effects of vibration on the course of irradiation injury were evaluated on the basis of mortality, the average duration of life of animals which died, changes in body weight, and also on the basis of certain hematological indices. The observation period was 30 days.

Experiments with mice indicated that a preliminary exposure to vibration (70 cps) four hr and one day prior to irradiation lowers the mortality rate by 10--20% and increases the average life span of those animals which died by 10--40%, as compared to mice which had been exposed only to irradiation. On the other hand, it was found that if exposure to vibration takes place five days prior to irradiation, it has an effect of increasing the mortality and decreasing the average duration of life of animals which die.

When animals were exposed to vibration 4 hr, 24 hr, and five days after irradiation, mortality diminished by 15--38% and the average life span of animals which died increased.

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ACC NR: AT6036645

If preliminary exposure to vibration of 700 cps was one hr prior to irradiation, it did not cause any noticeable modification of the course and outcome of radiation injury. If 700-cps vibration was applied one day after exposure to irradiation, it had no noticeable effect and if it was applied five days later it increased the effects of radiation injury.

Hematological investigations of dogs which had been irradiated 2 hr or 24 hr after vibration [presumably at 70 cps] showed that the number of leukocytes and erythrocytes was higher than in control animals. However, no stable or marked shifts were observed in the leukocyte formula.

The data obtained indicate the necessity of further study of changes which arise as a result of the effects of vibration and ionizing radiation in various combinations. Most interesting are studies of repeated effects of vibration on the course and outcome of radiation injury.

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

NADDACHINA, T.A.; L'VOVA, T.N. (Moskva)

Bilateral symmetrical cortical necrosis of the kidneys. Arkh.
pat. 26 no.8:34-42 '64 (MIRA 18:2)

1. Kafedra patologicheskoy anatomii (zav. - prof. A.V.
Smol'yannikov) Tsentral'nogo instituta usovershenstvovaniya
vrachey i patologoanatomicheskoye otdeleniye (zav. V.P.Kesareva)
Klinicheskoy bol'nitsy imeni S.P. Botkina (glavnyy vrach Yu.G.
Antonov), Moskva.

L'VOVA, T.V.

Structure of the Trigur'ya pluton of quartz monzonites and
granodiorites. Zap. Ukr. otd. Min. ob-va [no.1]:146-149
'62. (MIRA 16:8)

1. Kiyevskiy gosudarstvennyy universitet, kafedra poleznykh
iskepayemykh.

BARTOSHEVSKIY, V.I. [deceased]; KULAKOVSKIY, V.K.; L'VOVA, T.V.; PLATONOV, I.N.

Structural and petrological characteristics and accessory
mineralization of some plutons in northern Kazakhstan.
Sborynauk.rab.Kiev.un. no.1313-23 '63.

(MIRA 18:11)

5.2400(A)

68925

SOV/81-60-1-644

Translation from: Referativnyy zhurnal. Khimiya, 1960, Nr 1, p 91 (USSR)

AUTHORS: Markovskiy, L.Ya., L'vova, V.I., Kondrashev, Yu.D.

TITLE: On the Production of Elemental Boron in an Electric Glow Discharge

PERIODICAL: V sb.: Tr. Konferentsii po khimii bora i yego soyedineniy. Moscow, Goskhimizdat, 1958, pp 36 - 45

ABSTRACT: It is expedient to carry out the process of BCl_3 reduction by hydrogen in an electrical glow discharge at a pressure of 30 - 200 mm Hg. The formation of elemental boron in the highly-dispersed state as well as in the form of a growth on the electrodes depends on the kinetic and electrical conditions of the process. The laboratory production of highly-dispersed boron in the glow discharge with a purity of up to 99.9% with a yield of up to 50% from BCl_3 is possible at a single passing of the gas mixture through the discharge. According to the data of comparative roentgenographic investigations of elemental boron obtained by various methods, electrodischarge boron is the purest and the most typical sample of microcrystalline boron.

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Authors' summary

L'VOVA, V.N.

BOCHEVER, F.M.; L'VOVA, V.N.

Evaluating underground water resources to be used for water
supply systems. Vod.i san.tekh. no.5:22-26 My '57. (MIRA 10:7)
(Water, Underground)

SERZHANIN, A.I.; L'VOVA, V.P.

Diagnosis and treatment of stomach cancer. Trudy Vor. med. inst.
52:143-146 '63. (MIRA 18:3)

1ST AND 10TH COLUMNS																									
COMMON ELEMENTS																									
<p>CP L'VOVA, V.V.</p> <p>The role of unilateral permeability in the intestinal absorption. D. L. Rubinshtein and V. V. L'vova. <i>J. Physiol. (U. S. S. R.)</i> 24, 057-63(1938); <i>Khim. Referat. Zhur.</i> 2, No. 2, 56(1939).—The intestinal tract and its blood vessels were washed simultaneously according to the method of Mond. Diffusing substances were added to the different liquids used. The expts. proved a unilateral movement through the intestinal wall (the same for the acid as for the basic dyes) from the blood vessels into the intestinal tract, but in a direction different from the direction of the physiol. absorption. Glucose (which is actively absorbed by the intestinal wall of mammals) showed no unilateral absorption through the intestines of frogs. In the physiol. processes of intestinal absorption the unilateral permeability plays no role. The unilateral passing of the dyes in Mond's expts. is attributed to the absorption of the dye (diffused through the intestinal wall) by the endothelium of the blood vessels. W. R. Henn</p>																									
COMMON VARIABLES INDEX																									
<p>ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>FROM SOURCE</p> <p>1ST AND 10TH COLUMNS</p>																									

L'VOVA, V. V.

L'VOVA, V. V. - "Investigation of the Mechanism of Intestinal Absorption."
Sub 14 Oct 52, Acad Med Sci USSR. (Dissertation for the Degree of
Candidate in Biological Sciences).

SO: Vechernaya Moskva January-December 1952

L'voVA, V.V.

Nitrogen metabolism in dogs during prolonged protein starvation and intravenous feeding by protein hydrolyzate. N. A. Fedorov and V. V. L'voVA (Inst. Biol. and Med. Chem., Acad. Med. Sci. U.S.S.R., Moscow). *Ark. Patol.* 16, No. 3, 54-63 (1954).—Protein hydrolyzate (prepn. 76) is assimilated by dogs after long protein starvation. In early stages of such feeding the animal acquires a pos. N balance with assimilation coeff. of 44-49%. The amino N is assimilated by 88-94%. The retained N is included in the protein metabolism, causing a rise of serum proteins. Urea synthesis improves. Intravenous administration of prepn. 76 to such dogs does not effect a rise in wt. or restoration of hemoglobin level. G. M. K.

Electrophoretic studies of the proteins of blood serum of the dog. O. M. Galsinskaya, V. V. L'vova, and V. D. Vspenskaya (Inst. Biol. and Med. Chem., Acad. Med. Sci. U.S.S.R., Moscow). *Biokhimiya* 10, 319-31 (1965). The electrophoretic mobility of the following 8 protein blood-serum components of the dog were detd.: albumins, α_1 , α_2 , α_3 , β_1 , β_2 , and γ -globulins. The electrophoretic heterogeneity of α_1 , α_2 , and β_2 -globulins was established and the mobility was detd. of six new protein components, which were systematically observed in the mobility zone of the above 3 globulins. By means of electrophoretic analysis the relative and abs. concns. of albumin and of the 3 globulin groups (α , β , and γ) of the serum of dogs kept for 2-3 months on a protein-free diet were detd. The resultant hypoproteinemia was a reflection of the decrease in the albumin concn. in the blood with no change in the concn. of the globulins.

D. S. Levine

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L'VOVA, V.V. (Moskva); GURVICH, A.Ye. (Moskva); RODINOV, V.M. (Moskva);
FEDOROV, N.A. (Moskva); KHODOROV, B.I. (Moskva)

Nitrogen balance and regeneration of serum proteins in dogs exposed to a prolonged low-protein diet with intravenous administration of heterologous proteins. Arkh.pat.18 no.6:99-109 '56. (MIRA 9:12)

Iz laboratorii normal'noy i patologicheskoy fiziologii (zav. - prof. N.A.Fedorov) Instituta biologicheskoy i meditsinskoy khimii AMN SSSR (dir. - deyствitel'nyy chlen AMN SSSR prof. V.N.Orekhovich)

(BLOOD PROTEINS,

eff. of intravenous admin. of heterologous blood proteins without anaphylactogenic factors in low protein diet in animals (Rus))

(PLASMA SUBSTITUTES, effects,

serum proteins without anaphylactogenic factors on blood proteins & nitrogen balance in animals after prolonged low protein diet (Rus))

L'VOVA, V.V.; FEDOROV, N.A.

Role of vitamin B₁₂ in increasing the effectiveness of parenteral feeding with protein hydrolysate in case of surgical traumas. Vit. res. i ikh. isp. no.5:261-268 '61. (MIRA 15:1)

1. Tsentral'nyy ordena institut gematologii i perelivaniya krovi, Moskva.

(CYANOCOBALAMINE) (PROTEIN METABOLISM)
(OPERATIONS, SURGICAL)

L'VOVA, V.V.; FEDOROV, N.A., prof.

Role of vitamin B₁₂ in increasing the effectiveness of parenteral feeding with protein hydrolysates under conditions of surgical trauma. Biul. eksp. biol. i med. 52 no.12:23-28 D '61. (MIRA 14:12)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N.A.Fedorov) Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi Ministerstva, zdavookhraneniya SSSR (dir. - deystvitel'nyy chlen AMN SSSR A.A.Bagdasarov [deceased]), Moskva.

(CYANCOBALAMINE) (PROTEIN METABOLISM)
(SURGERY, OPERATIVE)

LEVOVA, V.V.; FEDOROV, N.A.

Comparative study of various forms of parental protein feeding
in surgical trauma in dogs. Pat. fiziol. i eksp. terap. 5 no. 5:
31-37 '61 (MIRA 17:4)

FEDOROV, N.A.; L'VOVA, V.V. (Moskva)

Effect of immunotherapy on nitrogen metabolism in thermal
burns in dogs. Pat. fiziol. i eksp. terap. 6 no.4:28-34
Jl-Ag '62. (MIRA 17:8)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespon-
dent AMN SSSR prof. N.A. Fedorov) TSentral'nogo ordana Lenina
instituta gematologii i perelivaniya krovi (dir. - dotsent
A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

L 2474-65 SSD/AMD/Fo-4/Fa-4
ACCESSION NR: AP4048732

S/0219/64/058/007/0036/0041

AUTHOR: L*vova, V. V.; Koryakina, I. K.

TITLE: Role of autointoxication in nitrogen balance alteration following thermal burns in dogs

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny*, v. 58, no. 7, 1964, 36-41

TOPIC TAGS: blood serum, burn, nitrogen balance, intoxication, trauma, immune serum, protein metabolism

ABSTRACT: The article discusses a parallel study of the alterations in nitrogen balance and blood serum toxicity in dogs with thermal trauma treated with the serum of burn convalescents and in dogs with repeated burns. Test dogs were maintained on a full-valued protein-free diet for 7-10 days until the nitrogen balance was established at a determined level, after which ten per cent surface burns were inflicted by one-minute exposure to a flame. The nitrogen balance was observed 5-6 days prior to burn infliction, on the day

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L 8474-65

ACCESSION NR: AP4048732

of burn infliction, for 7-10 days after burn infliction, upon administration of immune and normal blood serum, and also upon repeated burn infliction without treatment. Blood serum was analyzed by the hemoculture method. Two burned dogs were given immune serum intravenously in daily doses of ten milliliters per kilogram for six days. The immune serum was obtained from dogs 2-3 months following thermal trauma, and was enriched with glucose and vitamins. Serum activity was tested by the hemoculture method, and serum with an antitoxin titre of 1:16, 1:32 and higher was selected for use. Control animals were subjected to similar conditions, the only variable being that they were given control serum obtained from unburned dogs and enriched in the same manner with glucose and vitamins. Each dog received 0.1-0.09 grams of nitrogen per kilogram daily. The results indicated that the test serum neutralized the blood serum toxicity in burned animals, with a parallel reduction of protein disintegration in contrast to the preburn index, while the control serum failed to eliminate the toxemia induced by burn trauma and the nitrogen balance exceeded the preburn index by 30-60 percent. Upon inflicting a repeated burn 3 months following the primary burn, no blood serum toxicity was noted, and the protein disintegration index was about 50 percent lower than the primary burn index. The authors conclude that repeated burns exert an influence on

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the intensity of tissue protein disintegration, which is identical to the effect produced by the administration of immune serum.

ASSOCIATION: Patofiziologicheskaya laboratoriya Tsentral'nogo instituta gematologii i perelivaniya krovi Ministerstva zdravookhraneniya SSSR, Moskva (Pathophysiological Laboratory of the Central Institute of Hematology and Blood Transfusion, Ministry of Health)

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Card 3/3

L'VOVA, Ye.A.

Some results of measures for improving public health in the country;
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Province, Zdrav. Ros. Feder. 4 no.3:10-13 Mr '60. (MIRA 13:5)
(POGORELOYE DISTRICT (KALININ PROVINCE)--PUBLIC HEALTH, RURAL)

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1. Akademiya kommunal'nogo khozyaystva. Leningradskiy
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DEMICHEV, I.P., kand.meditsinskikh nauk; L'VOVA, Ye.I. studentka
(Leningrad)

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Extended observation of children with a history of tuberculous meningitis. Pediat. akush. ginek. no.3:21-24 '63 (MIRA 17:1)

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